College of San Mateo Official Course Outline

COURSE ID: DGME 175 TITLE: Interaction Design Units: 3.0 units Hours/Semester: 40.0-45.0 Lecture hours; 24.0-27.0 Lab hours; 80.0-90.0 Homework hours; 144.0-162.0 Total Student Learning hours Method of Grading: Grade Option (Letter Grade or Pass/No Pass) Recommended Preparation: DGME 164

2. COURSE DESIGNATION:

Degree Credit Transfer credit: CSU; UC

3. COURSE DESCRIPTIONS:

Catalog Description:

This course covers the essentials of interaction and visual design principles and how they are applied. Students learn how to evaluate and analyze the uses of interactive media and understand how viewing interactive media on a variety of screen sizes and devices may impact the experience. They also learn how to apply the principles of design and usability when creating interactive content.

4. STUDENT LEARNING OUTCOME(S) (SLO'S):

Upon successful completion of this course, a student will meet the following outcomes:

- 1. Identify the different user experience (UX) interactions and visual design principles.
- 2. Create and showcase a unique interface that reflects a user-focused design approach, integrates research data, incorporates design expertise, and aligns with stakeholder objectives.
- 3. Implement interaction and visual design principles to improve the user interface.

5. SPECIFIC INSTRUCTIONAL OBJECTIVES:

Upon successful completion of this course, a student will be able to:

- 1. Apply knowledge of interaction design and the importance of interaction design when developing apps, products, services and systems.
- 2. Demonstrate design methods and skills, sketching techniques, scenarios, storyboarding, wireframing, and prototyping.
- 3. Distinguish how to think critically about design and design solutions, including the ability to reflect on and discuss interaction solutions.

6. COURSE CONTENT:

Lecture Content:

- 1. Definition and application of interaction design
 - A. Psychological
 - B. Cultural
 - C. Technological
- 2. Five principles of interaction design
 - A. Consistency
 - B. Perceivability
 - C. Learnability
 - D. Predictability
 - E. Feedback
- 3. The Role of the Interaction Designer in Product Management and Development
 - A. Product Manager
 - B. Engineer
 - C. Quality assurance
 - D. Interaction designer
 - E. User experience writer & content strategist
 - F. User experience researcher
- 4. Storytelling through design
- 5. Testing and revising interaction designs
- 6. Addressing bias in interaction design

- A. Stakeholder bias
- B. Designer bias
- C. Engineer bias
- D. User bias
- E. Adjusting for bias
- 7. Integration of design and production management
 - A. Research
 - B. Production
 - Technical a.
 - b. Design
 - C. Management

Lab Content:

Students will use lab time to complete assignments and projects under the guidance of the instructor. The lab exercises will align with the course's learning objectives and progressively build students' skills and understanding of various digital media concepts and tools.

Lab exercises will consist of:

- Developing personas
- Wireframing, Mockup & Prototyping
- Accessibility/Usability Testing
- Peer Design Critiques

7. REPRESENTATIVE METHODS OF INSTRUCTION:

Typical methods of instruction may include:

- A. Lecture
- B. Lab
- C. Activity
- D. Critique
- E. Discussion
- F. Guest Speakers
- G. Observation and Demonstration
- H. Other (Specify): A. Lecture/Discussion Encompassing in-class lectures, demonstrations, and discussion on course topics. B. Labs - Students will demonstrate examples of course topics on lab computers. C. Reading assignments - Students will be given reading assignments to become familiar with the material presented in a corresponding lecture, lab, or quiz. D. Project assignments - Students will be given a project assignment to demonstrate their knowledge of the software and theory.

8. REPRESENTATIVE ASSIGNMENTS

Representative assignments in this course may include, but are not limited to the following:

Writing Assignments:

Writing Assignments

- Approximately 5-6 short answer and essay answer questions per assignment [4-5 assignments per topic]. 25-100 words per answer weekly.
- Approximately 10-15 written short answers incorporated in the 10-15 assignments and 5-6 projects. 25-100 words per answer weekly.

For example:

- Interactive User Flow Diagram
- Accessibility Assessment
- Usability Testing
 User-Centered Design Principles

Reading Assignments:

- 1. Textbook Required readings from chapters
- Weekly reading from the course textbook [1-2 chapters] approx. 30-50 pgs./week
 - 2. Online Resources
- 3. Instructor Resources

Other Outside Assignments:

Completion of homework assignments and projects.

9. REPRESENTATIVE METHODS OF EVALUATION

Representative methods of evaluation may include:

A. Class Participation

- B. Class Performance
- C. Class Work
- D. Exams/Tests
- E. Group Projects
- F. Homework
- G. Lab Activities
- H. Oral Presentation
- I. Papers
- J. Portfolios
- K. Projects
- L. Quizzes
- M. Written examination
- N. A. Projects Students will be assigned projects to execute to specifications. Students will be graded on the performance of these projects. B. Quizzes/Midterm/Final Exam -Students will be tested on their retention of important principles. C. In-class Demonstrations -Students will make presentations and demonstrate course topics.

10. REPRESENTATIVE TEXT(S):

Possible textbooks include:

A. Rogers, Yvonne. Interaction Design: Beyond Human-Computer Interaction, 6th ed. Wiley, 2023

Origination Date: October 2023 Curriculum Committee Approval Date: December 2023 Effective Term: Fall 2024 Course Originator: Diana Bennett